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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
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INTERFERENCES**

**Applicant:** Witold A. Ziamo

**Serial No.:** 09/173,109

**Filed:** October 15, 1998

**Group:** 2162

**Examiner:** John L. Young

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Technology Center 2100

**Title:** INTERNET LINKED COMPUTER PERIPHERAL, METHOD OF  
USING THE INTERNET LINKED COMPUTER PERIPHERAL,  
AND SYSTEM RELATED THERETO.

**CERTIFICATE OF FIRST CLASS MAIL FILING UNDER  
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**Dated:** March 14, 2002

**Witold A. Ziamo  
Reg. No. 39,888**

**Assistant Commissioner for Patents  
Washington, D.C. 20231**

Sir:

### **BRIEF OF APPELLANT**

This is an appeal from the final wholesale rejection of the Examiner dated August 15, 2001 rejecting claims 21-41, all of the claims in the case. The Brief is accompanied by the requisite fee set forth in 37 CFR § 1.17(f). Applicant asserts that the Examiner has erred in rejecting the Applicant's computer peripheral, method and kit claims under 35 U.S.C. § 103.

#### **Related Appeals (37 CFR 1.92(C)(2))**

There is a related appeal currently pending in U.S. patent application serial no. 08/402,622. There are no related interferences.

#### **Status of Claims (37 CER 1.92 (C) (3))**

This application was filed on October 15, 1998 with 20 claims including three independent claims (Claims 21, 24 and 34). All of the claims were rejected on October 12, 2000. In Applicant's response dated April 12, 2001, Applicant amended Claims 21→35, and added new claims 37-41. In the next Office Action dated August 14, 2001, which was a Final Action, the Examiner rejected all of the claims.

The status of the claims was and is as follows:

Allowed claims: none;

Claims objected to none; and,

Claims rejected: 21-41.

**Status of Amendments (37 CFR 1.92(C)(4))**

All amendments amending the claims in this case have been entered. The claims as set out in the Appendix include the entered amendments.

**SUMMARY OF THE INVENTION (37 CFR § 1.192(C)(5))**

The particular technology relates to solving the problems of on-line purchasing of items over the Internet by consumers. The invention relates to a computer peripheral 100, 101 (FIG. 3) as an input device for a personal computer or workstation 800-805. The peripheral 1001, 101 simplifies and safeguards the flow of monetary transaction information onto the Internet, and includes a smart card reader 307, 307' for reading credit or debit card information from an information bearing smart credit and/or debit card; and, a secure link to the Internet. The capture of monetary transaction information for Internet transactions is facilitated and the monetary transaction is safeguarded by capture of the information on a transaction by transaction basis. An Internet based method of safeguarding and streamlining the entry of monetary transaction information from information bearing smart credit and/or debit cards is also provided. The method includes the steps of providing individuals making monetary transactions with a computer peripheral as an input device for a personal computer or workstation. The computer peripheral 100, 101 has a secure link to the Internet, and a magnetic stripe reader or smart card reader 307, 307' for reading information from the credit or debit cards, a communication

link to a personal computer or work station for communicating the credit or debit card information to the personal computer or work station, and the computer or work station having means for communicating the card information to the Internet for further processing. The method includes encrypting or coding at least a portion of the card information entered by respective individuals prior to transmission of the card information to the personal computer or the work station. The invention further includes a kit to facilitate Internet shopping by way of smart credit and debit cards by consumers.

The problems in the art are numerous. A problem occurs when consumers desire to purchase products and services over the Internet. Further, there is no way for a consumer to enter his smart card electronic information onto his or her personal computer to make a purchase of products or services over the Internet. There is no way to enter and safeguard the entry of credit or debit card information quickly. The invention solved significant problems in the art.

**Issues (37 CFR 1.92 (C)(6))**

1. Whether a *prima facie* case of obviousness of claims 21-41 (drawn to a method, computer peripheral and kit) under 35 U.S.C. § 103 has been established in view of a single reference, Schneier, Bruce APPLIED CRYPTOGRAPHY (New York: John Wiley & Sons, Inc. 1994) ("Schneier"), in view of the Examiner's understanding of *purported* common knowledge in the art absent any evidentiary record related thereto, and without any suggestion or motivation to select or combine elements from the combination of *purported* art.

**Grouping of Claims (37 CFR 1.92(C)(7))**

Applicant asserts that Claim 22 is separately patentable from claim 21 from which it depends, and the other claims herein.

Applicant asserts that Claims 5-6 is separately patentable from claim 1 from which it depends, and the other claims herein.

Applicant asserts that Claim 23 is separately patentable from claim 21 from which it depends, and the other claims herein.

Applicant asserts that method Claim 24 is separately patentable from claim 21 and kit claim 34 which it depends, and the other claims herein.

Applicant asserts that Claim 26 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 27 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 28 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 29 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 30 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 31 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 32 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 33 is separately patentable from the claim from which it depends, and the other claims herein.

Claims 34-35, and 39-41 stand or fall together.

Applicant asserts that Claim 36 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 37 is separately patentable from the claim from which it depends, and the other claims herein.

Applicant asserts that Claim 38 is separately patentable from the claim from which it depends, and the other claims herein.

**Argument (37 CFR 1.92(C)(8))**

***DESCRIPTION OF THE REFERENCES***

The Examiner is solely relying on a single reference (item of evidence) in his rejections: Schneier, Bruce APPLIED CRYPTOGRAPHY (New York: John Wiley & Sons, Inc. 1994) (herein referred to as “Schneier”) → a reference not directed at solving any of the problems consumers face when making purchases with credit or debit cards on the Internet. The reference is deficient evidence for establishing a *prima facie* case of obviousness or anticipation as the Examiner has conceded.

The Examiner attempts to impermissibly fill the gap in the knowledge of the art by relying on the his *purported* understanding of additional art which is allegedly common knowledge. The art fails as evidence sufficient to establish a *prima facie* case of obviousness or anticipation as shown below.

## ***ARGUMENT***

The Applicant respectfully asserts that the Examiner has not made out a *prima facie* case of obviousness over Schneier.

The Applicant respectfully asserts that the Examiner has *de facto* conceded that Applicant's specific claim recitations in claims 21-41 are missing in Schneier. This *de facto* concession is based on the Examiner's failure to point to the specific portion of the reference where the Applicant's claimed recitations are alleged by the Examiner to be located. The Examiner has erred, as a matter of law, by failing to provide substantial evidence supporting his key factual findings. The rejections of these claims must be reversed.

The Examiner concedes that that the only reference he is only relying upon is Schneier. The Applicant has clearly pointed out where Schneier does not teach or fairly suggest the claimed recitations of claims 21-41. The Examiner agrees with Applicant that these recitations are missing from Schneier as shown in Chart One below.

In an attempt to make up the deficiencies of the art with respect to a teaching or fair suggestion of Applicant's claimed computer peripheral and kit elements and method steps, the Examiner's conclusions of unpatentability are all based upon core factual findings which comprise the Examiner's own understanding or experience – and on his assessment of what would be basic knowledge or common sense in the art. The Examiner has pointed to no concrete evidence in the record to support these findings even though challenged to do so. This the Examiner cannot do under the

holding in *In re Zurko*, 258 F.3d 1379, 59 USPQ2d 1697 (Fed. Cir. 2001) and *In re Sang Su Lee*, \_\_\_\_ F.3d \_\_\_\_, \_\_\_\_ USPQ2d \_\_\_\_ (Fed. Cir. 2002).

With respect to the rejections of claims 21-41, the Examiner has failed to provide any concrete evidence in the record to support core factual findings of that which is alleged to be “basic knowledge” or “common sense” as shown in Chart One below. As such, the rejections under 35 U.S.C. Section 103 lack substantial evidence support and must be reversed. *In re Zurko*, F.3d (Fed. Cir. 2001). *In re Zurko* dictates reversal of the Examiner’s rejections:

**[D]eficiencies of the cited references cannot be remedied by the Board’s general conclusions about what is “basic knowledge” or “common sense” to one of ordinary skill in the art.** As described above, the Board contended that even if the cited UNIX and FILER2 references did not disclose a trusted path, “it is basic knowledge that communication in trusted environments is performed over trusted paths” and, moreover, verifying the trusted command in UNIX over a trusted path is “nothing more than good common sense.” *Ex parte Zurko*, slip op. at 8. **We cannot accept these findings by the Board. This assessment of basic knowledge and common sense was not based on any evidence in the record and, therefore, lacks substantial evidence support.** As an administrative tribunal, the Board clearly has expertise in the subject matter over which it exercises jurisdiction. This expertise may provide sufficient support for conclusions as to peripheral issues. **With respect to core factual findings in a determination of patentability, however, the Board cannot simply reach conclusions based on its own understanding or experience – or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.**<sup>2</sup> To hold otherwise would render the process of appellate review for substantial evidence on the record a meaningless exercise. *Baltimore & Ohio R.R. Co. v. Aderdeen & Rockfish R.R. Co.*, 393 U.S. 87, 91-92 (1968) (rejecting a determination of the Interstate Commerce Commission with no support in the record, noting that if the Court



were to conclude otherwise "[t]he requirement for administrative decisions based on substantial evidence and reasoned findings -- which alone make effective judicial review possible -- would become lost in the haze of so-called expertise"). **Accordingly, we cannot accept the Board's unsupported assessment of the prior art.**

In re Zurko, \_\_\_ F.3d at \_\_\_\_\_ (Emphasis added.)

Similarly *In re Sang Su Lee* mandates reversal of the Examiner's rejections:

As applied to the determination of patentability vel non when the issue is obviousness, "it is fundamental that rejections under 35 U.S.C. §103 must be based on evidence comprehended by the language of that section." In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed. Cir. 1983). [] When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. [] "The factual inquiry whether to combine references must be thorough and searching." Id. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. [] **The need for specificity pervades this authority.** [] With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. **This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority.** It is improper, in determining

whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). **Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.** []

In its decision on Lee's patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderchopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action. []

**The "common knowledge and common sense" on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. This court explained in Zurko, 258 F.3d at 1385, 59 USPQ2d at 1697, that "deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" The Board's findings must extend to all material facts and must be documented on the record, lest the "haze of so-called expertise" acquire insulation from accountability. "Common knowledge and common sense," even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority. [] The case on which the Board relies for its departure from precedent, In re Bozek, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969), indeed mentions "common knowledge and common sense," the CCPA stating that the phrase was used by the Solicitor to support the Board's conclusion of obviousness based on evidence in the prior art. Bozek did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. Bozek did not hold that objective**

analysis, proper authority, and reasoned findings can be omitted from Board decisions. Nor does Bozek, after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421 (Fed. Cir. 1999), that Bozek's reference to common knowledge "does not in and of itself make it so" absent evidence of such knowledge.[]

The patent examiner and the Board are deemed to have experience in the field of the invention; however, this experience, insofar as applied to the determination of patentability, must be applied from the viewpoint of "the person having ordinary skill in the art to which said subject matter pertains," the words of section 103. In finding the relevant facts, in assessing the significance of the prior art, and in making the ultimate determination of the issue of obviousness, the examiner and the Board are presumed to act from this viewpoint. **Thus when they rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record.** The failure to do so is not consistent with either effective administrative procedure or effective judicial review. The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.

Applicant now addresses each of the claims and their specific recitations, and the Examiner's error in rejecting these claims since these recitations are missing from the combination of the art of record → both Schneier and the Examiner's understanding.

Chart One below recites the claimed recitation not taught or fairly suggested in the combined art of record. The Examiner's rejection which is based solely upon

that which the Examiner asserts is “**basic knowledge**” or “**common sense**” to one of ordinary skill in the art appears next to the missing claim recitation. As described above, these rejections are the same types of rejections the Federal Circuit reversed in In re Zurko. There the Board contended that even if the cited UNIX and FILER2 references did not disclose a trusted path, “it is *basic knowledge* that communication in trusted environments is performed over trusted paths” and, moreover, verifying the trusted command in UNIX over a trusted path is “nothing more than good common sense.” The Federal Circuit refused to accept these findings by the Board in In re Zurko. Similarly, in this case the Examiner’s assessment of basic knowledge and common sense is not based on any evidence in the record and, therefore, lacks substantial evidence support. The Examiner’s rejections are akin to the rejections rejected by the Federal Circuit. With respect to core factual findings in a determination of patentability, the Examiner cannot simply reach the conclusions in Chart One below based on his own understanding or experience -- or on his assessment of what would be basic knowledge or common sense. Rather, the Examiner must point to some concrete evidence in the record in support of these findings. This he has failed to do. Accordingly, the Examiner’s unsupported assessment of the prior art cannot be accepted, and the rejections must be reversed.

Chart One

Claim(s)	Claim recitation not taught or fairly suggested by combined art	Quote from record where Examiner concedes that Schneier does not teach specific claim recitations:	Finding upon which rejection is based involving Examiner's <i>purported</i> understanding of what is basic knowledge or common sense
21	<p>An Internet linked computer peripheral as an input device for a personal computer or workstation comprising, in combination:</p> <p>smart card reader for reading credit and/or debit card information from an information bearing smart credit and/or debit card; and, a secure link to the Internet.</p>	<p>"<u>Schneier</u> does not explicitly show "credit or debit cards"." Paper No. 11, p. 4.</p>	<p>"It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the <u>Schneier's</u> (pp. 296-297) "<i>smart card</i>" disclosure of would have been selected in accordance with "credit or debit cards" because smart credit and debit cards would have been notoriously well known by one of ordinary skill in the art at the time of the invention." Paper No. 11, p. 4</p>

22	<p>The computer peripheral of claim 21 in which the secure link to the Internet comprises an encryption routine on the computer peripheral encrypting the credit and/or debit card information prior to transmission of the credit or debit card information to the personal computer or workstation.</p>	<p>“<u>Schneier</u> does not explicitly show “the secure link to the Internet comprises encryption means routine on the computer peripheral encrypting the credit and/or debit card information prior to transmission of the credit or debit card information to the personal computer or workstation.” <i>Id.</i> at p. 4.</p>	<p>“ “Official Notice” is taken that both the concept and the advantages of “the secure link to the Internet comprises an encryption routine on the computer peripheral encrypting the credit and/or debit card information prior to transmission of the credit or debit card information to the personal computer or workstation...” because such concepts and advantages would have provided means to safeguard the credit and/or debit card information prior to transmission of the credit or debit card information.” <i>Id.</i> at 4.</p>
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23	<p>The computer peripheral of claim 21 in which the secure link further comprises an encryption routine at the personal computer or work station encrypting the credit or debit card information prior to transmission of the credit or debit card information onto the Internet.</p>	<p>“<u>Schneier</u> does not explicitly show “the secure link further comprises an encryption routine at the personal computer or work station encrypting the credit or debit card information prior to transmission of the credit or debit card information onto the Internet....” <i>Id.</i> at 5.</p>	<p>““Official Notice” is taken that both the concept and the advantages of “the secure link further comprises an encryption routine at the personal computer or work station encrypting the credit or debit card information prior to transmission of the credit or debit card information onto the Internet... .” because such concepts and advantages would have provided means to safeguard the credit and/or debit card information prior to transmission of the credit or debit card information.” <i>Id.</i> at 5.</p>
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24	<p>A method comprising,</p> <p>providing individuals making monetary transactions with a smart card reading computer peripheral as an input device for a personal computer or workstation, said smart card reading computer peripheral designed to send monetary transaction data to said personal computer or workstation for delivery onto the Internet, and securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing.</p>	<p>"<u>Schneier</u> does not explicitly show "providing individuals making monetary transactions with a smart card reading computer peripheral as an input device for a personal computer or workstation said smart card reading computer peripheral designed to send monetary transaction data to said personal computer or workstation for delivery onto the Internet, and securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing." <i>Id.</i> at 6.</p>	<p>"Official Notice" is taken that both the concept and the advantages of "providing individuals making monetary transactions with a smart card reading computer peripheral as an input device for a personal computer or workstation said smart card reading computer peripheral designed to send monetary transaction data to said personal computer or workstation for delivery onto the Internet, and securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing..." because such concepts and advantages would have provided means to safeguard the credit and/or debit card information prior to transmission of the credit or debit card information and also, because such concepts and advantages were well known in the art." <i>Id.</i> at 6-7.</p>
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25	<p>The method of claim 24 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the monetary transaction data to the personal computer or the work station.</p>	<p>“<u>Schneier</u> does not explicitly show “encrypting or coding at least a portion of the monetary transaction date entered by respective individuals prior to transmission of the monetary transaction data to the personal computer or the work station...” <i>Id.</i> at 7.</p>	<p>“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier (pp. 329), i.e., “Message Digest” would have been selected in accordance with “a portion of the monetary transaction date entered by respective individuals. . . .” of messages, because “Message Digest” capability would have provided a fingerprint of the message that is unique. (See Schneier pp. 329-330); furthermore,</p> <p>“Official Notice” is taken that both the concept and the advantages of “encrypting or coding at least a portion of the monetary transaction date entered by respective individuals prior to transmission of the monetary transaction data to the personal computer or the work station... .” because such concepts and advantages would have provided means to safeguard the credit and/or debit card</p>
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26	The method of claim 24 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the card information to the Internet.	“ <u>Schneier</u> does not explicitly show “a portion of the monetary transaction data entered by respective individuals.” <i>Id.</i> at 8.	“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier (pp. 329). i.e., “Message Digest” would have been selected in accordance with “a portion of the monetary transaction data entered by respective individuals... .” of messages, because “Message Digest” capability would have provided a fingerprint of the message that is unique. (See Schneier pp. 329-330).” <i>Id.</i> at 8-9.
27	The method of claim 25 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the card information to the Internet.		“Claim 27 is rejected for substantially the same reasons as claim 26.” <i>Id.</i> at 9.

28	<p>The method of claim 24 in which said monetary transaction data further comprises credit card or debit card information, and in which said securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing further comprises presenting the credit card or debit card information to the smart card reading computer peripheral; transferring encrypted credit card or debit card information from the personal computer or work station to the Internet; and, off-loading the encrypted credit or debit card information from the Internet to a processor, the processor being a card account processor, bank credit card processing device, debit card processing device, recipient credit card processing device</p>	<p>"Claim 28 is rejected for substantially the same reasons as claim 24." <i>Id.</i> at 9.</p>
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29	The method of claim 28 in which the card information is encrypted at the smart card reading computer peripheral.		"Claim 29 is rejected for substantially the same reasons as claim 25." <i>Id.</i> at 9.
30	The method of claim 28 in which the credit card or debit card information is encrypted at the personal computer or workstation.		"Claim 30 is rejected for substantially the same reasons as claim 25." <i>Id.</i> at 9.
31	The method of claim 28 in which the card information is encrypted at both the personal computer or workstation and at the smart card reading computer peripheral.		"Claim 31 is rejected for substantially the same reasons as claim 25." <i>Id.</i> at 9.

32	<p>The method of claim 28 further comprising correlating transaction information other than the card information to the encrypted debit or credit card information, and decoding the encrypted debit card or credit card information at a device remotely located from the personal computers or work stations.</p>	<p><u>"Schneier</u> does not explicitly show "correlating transaction information other than the card information to the encrypted debit or credit card information." <i>Id</i> at 10.</p>	<p>"It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Schneier disclosure of "i'timestamping" would have been selected in accordance with "correlating transaction information other than the card information to the encrypted debit or credit card information. . . ." because "timestamping "would have been notoriously well known by one of ordinary skill in the art at the time of the invention." <i>Id.</i> at 10.</p>
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33	The method of claim 28 further comprising entering a PIN number.	<u>"Schneier</u> does not explicitly show "entering a PIN number." <i>Id.</i> at 10.	"It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Schneier disclosure of a unique identifier would have been selected in accordance with "entering a PIN number.. . ." because unique identifiers would have been notoriously well known by one of ordinary skill in the art at the time of the invention." <i>Id.</i> at 10.
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34	<p>A kit for streamlining Internet transactions comprising:</p> <p>an Internet linked smart card reading computer peripheral as an input device for a personal computer; a communication link for communicating the credit or debit card information from the Internet linked smart card reading computer peripheral to a personal computer; and, a routine that allows the card information to be securely transferred from the computer peripheral to a remote computer other than the personal computer, the remote computer being communicatively linked to the Internet.</p>		<p>"Claim 34 is rejected for substantially the same reason as claim 21." <i>Id.</i> at 10.</p>
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35	The kit of claim 34 further comprising a monitor, at least two speakers, and a keyboard; and, in which the remote computer is selected from the group consisting of an acquiring bank computer, and a card account processor computer.	“Schneier does not explicitly show “a monitor, speakers, and a keyboard.” ” <i>Id.</i> at 11	“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with “a monitor, speakers, and a keyboard. . . .” because such a configuration would have been notoriously well known by one of ordinary skill in the art at the time of the invention.” <i>Id.</i> at 1.
36	The kit of claim 34 further comprising the Internet.	“ <u>Schneier</u> does not explicitly show a “kit further comprising the Internet.” ” <i>Id.</i> at 11.	“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with a “kit further comprising the Internet.. . .” because the pervasiveness of the Internet would have been notoriously well known by one of ordinary skill in the art at the time of the invention.” ” <i>Id.</i> at 11-12.



37	The method of claim 32 further comprising crediting or debiting an account.	<u>"Schneier</u> does not explicitly show "crediting or debiting an account." " <i>Id.</i> at 12.	"It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with "crediting or debiting an account. . " because such procedures in electronic monetary transactions were notoriously well known by one of ordinary skill in the art at the time of the invention." " <i>Id.</i> at 12.
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38	The method of claim 37 further comprising sending a receipt comprising information representative of at least a portion of said monetary transaction data.	“Schneier does not explicitly show “sending a receipt comprising information representative of at least a portion of said monetary transaction data.”” <i>Id.</i> at 12.	“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of <u>Schneier</u> would have been selected in accordance with “sending a receipt comprising information representative of at least a portion of said monetary transaction data... “ because such procedures in electronic monetary transactions of sending a confirmation or receipt associated with electronic monetary transactions were notoriously well known by one of ordinary skill in the art at the time of the invention.”” <i>Id.</i> at 12-13.
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39	The kit of claim 34 further comprising a multiplicity of personal computers.	“ <u>Schneier</u> does not explicitly show “a multiplicity of personal computers.”” ” <i>Id.</i> at 13.	“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with “a multiplicity of personal computers... .” because such implementation of multiple peripherals was notoriously well known by one of ordinary skill in the art at the time of the invention.” ” <i>Id.</i> at 13.
40	The kit of claim 39 further comprising a plurality of monitors.	“Schneier does not explicitly show “a plurality of monitors.” ” <i>Id.</i> at 14.	“It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with “a plurality of monitors. . . .” because such implementation of multiple peripherals was notoriously well known by one of ordinary skill in the art at the time of the invention.” <i>Id.</i> at 14.

41	The kit of claim 40 further comprising a plurality of keyboards and speaker.	"Schneier does not explicitly show "a plurality of keyboards and speakers." <i>Id.</i> at 14.	"It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with "a plurality of keyboards and speakers... ." because such implementation of multiple peripherals was notoriously well known by one of ordinary skill in the art at the time of the invention." <i>Id.</i> at 14.
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The Examiner alleges that Applicant's combination of claim recitations, method steps, and kit elements is well known, in light of Schneier in combination with art which is allegedly well known in the area of consumer Internet shopping based upon the Examiner's understanding of this art and what the Examiner alleges is common knowledge.

The Examiner has failed to provide motivation from the art of record for an artisan to select or combine elements from the art cited in such a way as to reconstruct the Applicant's claimed inventions as claimed in claims 21-41. The motivation and indeed, the blue print is taken from Applicant's disclosure. This rejection is improper, and is an error of law since the Applicant's disclosure is not

prior art upon which a rejection can be based.

That is, the Examiner has failed to provide a motivation from the evidence of the art of record to make the **selection and combination** recited in these claims, and simply conducted a hindsight reconstruction of Applicant's invention using Applicant's invention as a template:

When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. [] "The factual inquiry whether to combine references must be thorough and searching." *Id.* It must be based on objective evidence of record. [] **The need for specificity pervades this authority.** [] With respect to Lee's application, neither the examiner nor the Board adequately supported the **selection and combination** of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. **This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority.** It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

*In re Sang Su Lee.*

The Examiner's reasoning for the selection and combination of references is just like the Examiner's reasoning which the Federal Circuit rejected in *In re Sang*

*Su Lee*: The Examiner's statements cited in Chart One are conclusory. These conclusory statements are identical to those rejected by the Federal Circuit in *In re Sang Su Lee*: "the demonstration mode is just a programmable feature *which can be used* in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode *is* user friendly and it functions as a tutorial" and, do not adequately address the issue of motivation to *select* or *combine* the references.

The Examiner has failed to provide a motivation from the evidence of the art of record to make the **selection** and **combination** of elements, and method steps with respect to the claims in Chart One. Even though the Examiner admits that he is only relying on Schneier his rejections of the claims in Chart One, the Examiner adds all of the alleged pieces of art in column four (4) of Chart One to fill the gaps of the Schneier reference. All of these alleged pieces of art are from the Examiner's *purported* understanding or basic knowledge of some art. Yet this art is unknown. It is not the art of consumer Internet shopping. This type of rejection has no basis in the factual record, and is in violation of *In re Zurko*:

**[D]eficiencies of the cited references cannot be remedied by the Board's general conclusions about what is "basic knowledge" or "common sense" to one of ordinary skill in the art. [] We cannot accept these findings by the Board. This assessment of basic knowledge and common sense was not based on any evidence in the record and, therefore, lacks substantial evidence support.[] With respect to core factual findings in a determination of patentability, however, the Board cannot simply reach conclusions**

based on its own understanding or experience -- or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings. [] Accordingly, we cannot accept the Board's unsupported assessment of the prior art.

*In re Zurko.*

Moreover, the combined art, both proper (Schneier) and improper art under *In re Zurko* (the remaining art the Examiner relies upon), fails to teach specific claim recitations in claims 21-41:

In support of his rejection of claim 21, the Examiner asserts that Schneier at pp. 117-124; pp. 428-435; pp. 296-297; and p. 436 suggests: "An Internet linked computer peripheral as an input device for a personal computer or workstation simplifying and safeguarding the flow of monetary transaction information onto the Internet, comprising, in combination: a smart card reader for reading credit and/or debit card information from an information bearing smart credit and/or debit card; and a secure link to the Internet, whereby the capture of monetary transaction is safeguarded by capture of the information on a transaction by transaction basis."

The Examiner concedes that Schneier does not explicitly show "credit or debit cards." To fill the whole in the teaching in the non-analogous art reference the Examiner looks to Schneier at pp. 296-297. The Examiner asserts that these pages of the reference suggest "credit or debit cards." Based upon these sections of Schneier, the Examiner reasons that it "would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Schneier (pp. 296-297) "smart card" disclosure would have been selected in

accordance with “credit or debit cards” because smart credit and debit cards would have been *notoriously well known by one of ordinary skill in the art at the time of the invention.*” (Emphasis added.)

The Examiner concedes that Schneier fails to teach all of the elements claimed in claim 21. This is why the Examiner failed to reject claim 21 under 35 U.S.C. § 102. This is not surprising since Schneier is not directed to the computer peripheral art. Schneier is non-analogous art to the computer peripheral art or consumer Internet shopping art. Indeed, the title of Schneier states that it is directed to the Applied Cryptography art related to protocols, algorithms, and source code in C, ***and not*** the non-analogous computer peripheral art and consumer Internet shopping art. The Examiner has provided no plausible motivation for an artisan in the computer peripheral/consumer Internet shopping art to look to the applied cryptography art of Schneier to obtain teachings therefrom.

The Examiner’s assertion that Schneier suggests the all of Applicant’s elements claimed in claim 21 and in the other claims does not establish a *prima facie* case of obviousness.

*The Examiner is simply citing a reference, Schneier, which indicates to the Examiner that isolated elements and/or features recited in the claims are allegedly known. This is not a sufficient basis for concluding that the combination of claimed elements or applicant’s method would have been obvious. Ex parte Hiyamizu, 10 USPQ2d 1393 (Bd. Pat Appeals & Int. 1988). This is impermissible error. “Under 35 U.S.C. § 103 where the Examiner has relied on the teachings of several references *for as in this case several places of text in a single**



*reference]*, the test is whether or not the references [or reference] viewed individually and collectively would have suggested the claimed invention to the person possessing ordinary skill in the art. [Citing *In re Kaslow*] It is to be noted, however, that citing references which merely indicate that *isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious*. That is to say, there should be something in the prior art or a convincing line of reasoning in the answer suggesting the desirability of combining the reference in such a manner as to arrive at the claimed invention.” *Ex parte Hiyamizu*, 10 USPQ2d 1393 (Bd. Pat. Appeals & Int. 1988) (Emphasis added).

The Examiner simply cannot provided a convincing line of reasoning to combine elements discussed in various parts of Schneier (a non-analogous source of art). Indeed, if one were to combine the various parts of Schneier, one would still not arrive at the Applicant’s invention. The portions of Schneier the Examiner cites for the teaching of elements of a computer peripheral as recited in claim 21 do not teach or suggest what the Examiner asserts it teaches or suggests.

*Where the Examiner commits error in the factual finding of what a reference teaches, the ultimate conclusion of obviousness is not supported by the evidence of record and must be reversed.* *In re Lueders*, \_\_\_ F.3d (Fed. Cir. 1997) (“It appears from the Board’s reasoning that it misinterpreted the above phrase from column 4, lines 43-46 of Hawkins concerning “other display/input means”. The Board must have read this phrase as if it were “other display and/or input means”.

While Hawkins does suggest using a touch capacitive keyboard and a liquid crystal display, it does not suggest using both a pressure sensitive keyboard and a liquid crystal display. Rather, we are persuaded by Lueders' arguments which are based on examples from the art; absent any contrary evidence cited by the Board in its opinion, we reverse the Board on this point.")

There is no mention of a smart card reading computer peripheral at all in Schneier. To wit,

- ~ pp.117-124 generally relate to paper money orders, and digital money orders and currency. These pages of Schneier are silent with respect to any elements of a computer peripheral for Internet shopping.
- ~ pp. 428-435 generally relate to Internet Privacy-Enhanced Mail standards. These pages of Schneier are silent with respect to any elements of a computer peripheral for Internet shopping.
- ~ pp. 296-297 generally relate to a multi-signature scheme by which a number of people can sequentially sign a message. These pages of Schneier are silent with respect to any elements of a computer peripheral for Internet shopping.
- ~ p. 436 generally relates to military message security protocols and pretty good privacy programs. These pages of Schneier are silent with respect to any elements of a computer peripheral for Internet shopping.

If one combines paper money orders, digital money orders, with Internet Privacy-Enhanced Mail standards, a multi-signature scheme by which a number of people can sequentially sign a message, with a smart card, with military message security protocols, and pretty good privacy programs, one does still not teach or fairly suggest an Internet linked computer peripheral as an input device for a personal computer or workstation, comprising, in combination a smart card reader for reading credit and/or debit card information from an information bearing smart credit and/or debit card; and, a secure link to the Internet. The teaching or suggestion of an Internet linked computer peripheral as an input device for a personal computer or workstation is missing from Schneier. *The Applicant respectfully asserts that the Examiner has committed an error in the factual finding of what Schneier allegedly teaches. The ultimate conclusion of obviousness is not supported by the evidence of record and must be reversed. In re Lueders, \_\_\_ F.3d \_\_\_ (Fed. Cir. 1997).*

The Examiner's assertion that a "*smart card*" disclosure *would have been selected* in accordance with "credit or debit cards" because smart credit and debit cards would have been *notoriously well known by one of ordinary skill in the art at the time of the invention* does not *as a matter of law* fill this void and provide a convincing line of reasoning suggesting the desirability of modifying Schneier in such a manner as to arrive at the claimed invention. It is not surprising that no convincing line of reasoning can be derived from the art of record since paper money orders, digital money orders, Internet Privacy-Enhanced Mail

standards, a multi-signature scheme by which a number of people can sequentially sign a message, military message security protocols, pretty good privacy programs have nothing to with solving the problems of Internet shopping using smart cards Applicant's invention solves.

The invention solves the problem of easily entering and securely transmitting credit and debit card information onto a user's personal computer for Internet shopping, etc. when a consumer wants to use a smart card. The conventional way that this information is entered using non-smart cards is by typing the information from the front of a plastic debit or credit card onto a keyboard of a computer. This process cannot be used with a smart credit or debit card that conveys electronic information therefrom to some other source.

None of the art or record, alone or in combination, was directed to solving the credit/debit card entry problems that consumers face when doing Internet shopping with smart cards. The invention also solves the problem of security for Internet shopping. None of the art of record, alone or in combination, solves both of these problems simultaneously using the Applicant's claimed invention.

The Examiner's "assumptions" with respect to what was allegedly well known in the area of Internet shopping at the time the invention was made do not constitute art upon which a proper rejection can be based. "(Applicant) argues that the examiner has not established a *prima fade* case of obviousness and that the *examiners assumptions* do not constitute the disclosure of the prior art. (The prior art is (the art of record), and it does not indicate that the relationship is well known in the art, nor does it suggest the claimed relationship. While the condition

described may be an optimal one, it is not "inherent" in (the art of record). *Nor are the means to achieve this optimal condition disclosed in the art of record, explicitly or implicitly.* Such a retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection." *In re Rijckaert*, 9 F. 3d 1531, 1533-1534 (Fed. Cir. 1993)(Emphasis added.) There is simply no teaching or suggestion for a smart card reading computer peripheral that solves the problems of Internet shopping by providing a smart card reader and a secure Internet link as claimed by Applicant.

The Examiner has conducted an impermissible case of hindsight reconstruction of the Applicant's invention using the Applicant's specification as a blueprint. The rejection of claim 21 is improper and must be reversed.

With respect to claim 22, the Examiner asserts that Schneier shows the system of claim 21 as discussed above. With respect to the recitations of claim 22, the Examiner concedes that the pages of Schneier cited above have a void. They fail to teach or suggest a secure link to the Internet that comprises an encryption routine on the computer peripheral encrypting the credit and/or debit card information prior to transmission of the credit or debit card information to the personal computer or workstation. The Examiner attempts to fill this gap of knowledge in the art by looking to Schneier pp. 165-169 which the Examiner contends suggests this recitation. From the alleged teachings of Schneier at pp. 165-169, the Examiner concludes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to include Schneier's (pp.165-169) "multiple encryption" in a computer peripheral. The Examiner in essence asserts that Schneier's (pp.165-

169) “*multiple encryption*” would have been selected in a computer peripheral in accordance with “encrypting information prior to transmission of the credit card information” because such methods would have been notoriously well known by one of ordinary skill in the art at the time the invention was made.

The Examiner has clearly committed an error of law by applying an incorrect standard for establishing *a prima facie case of obviousness*. “In order to establish *a prima facie* case of obviousness, it is necessary for the examiner to present *evidence*, preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art *would have been led* to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention.” Ex parte Revenged, 28 USPQ2d 1300, 1031 (B.P.A.I. 1993).

There is no discussion of a computer peripheral in Schneier’s (pp.165-169) or the other sections of Schneier cited by the Examiner. Pp. 165-169 generally relate to encryption of a plain text block. There is no discussion of multiple encryption of credit or debit card information. There is a gap of knowledge in the art. There is no evidence or suggestion to use multiple encryption on a computer peripheral or encryption of credit or debit card information or using the method steps claim in the sequence claimed by Applicant. The Examiner’s rejection is based upon a lack of evidence. It is improper and must be reversed.

With respect to claim 23, the Examiner asserts that Schneier shows the “system” of claim 22. The Examiner contends that pp. 165-169 of Schneier (in combination with pp. 428-435~ pp. 296-297; p. 436 discussed above) suggests the computer

peripheral of claim 22 in which the secure link further comprises an encryption routine at the personal computer or work station encrypting the credit or debit card information prior to transmission of the credit or debit card information onto the Internet.

The Examiner concedes that Schneier does not explicitly show the order in which the encryption is accomplished. The Examiner attempts to fill this void by stating that it is filled since Schneier suggests multiple ways of encrypting. From this assertion, the Examiner concludes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to select Schneier's (pp.165-169) "*multiple encryption*" in accordance with "encrypting... information prior to transmission of the credit. . . card information because such methods would have been notoriously well known by one of ordinary skill in the art at the time the invention was made. There is a gap in the knowledge in the art that the Examiner is trying to fill but cannot fill. The pages of Schneier (pp.165-169) relating to "*multiple encryption* " are silent with respect to having the encryption take place on more than one device, e.g. a computer peripheral and a computer or workstation. There is simply no teaching or suggestion in the art to fill this void. The Examiner is filling this void by looking at the Applicant's disclosure. The law and the application of the law to the case at hand is clear. "The cited references would not have taught or suggested the structure of the claimed [invention] in the absence of prior knowledge of [Applicant's invention]. [Applicant's system is not prior art against the claims of his own patent application. Nor is obviousness established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or

suggestion that the combination be made.” *In re Stencel*. 828 F. 2d 751 (Fed. Cir. 1987) (Emphasis added.). The rejection of claim 23 is improper and must be reversed.

Claim 24 recites: a method comprising, providing individuals making monetary transactions with a smart card reading computer peripheral as an input device for a personal computer or workstation, said smart card reading computer peripheral designed to send monetary transaction data to said personal computer or workstation for delivery onto the Internet, and securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing.

With respect to claim 24, the pages of *Schneier*, alone or in combination with the other art of record, do not teach or fairly suggest the method claimed by Applicant in claim 24. There is no teaching or suggestion in the art of record, alone or in combination, of a smart card reading computer peripheral as an input device for a personal computer or workstation. Since there is a gap in the art about this device, it follows that there is even a larger gap about what to do with such a device. “One cannot choose from the unknown.” *In re Ochiai*, \_\_\_ F.3d \_\_\_ (Fed. Cir. 1995). Moreover, as described above *Schneier* is silent about solving the problems of Internet shopping. Hence, it is not surprising that, none of the art of record, alone or in combination, fails to teach or fairly suggest providing individuals making monetary transactions with a smart card reading computer peripheral as an input device for a personal computer or workstation. The references aren’t directed to solving the problems of Internet



shopping. Hence, it is not surprising that there is no suggestion or motivation in any of the art of record for designing the smart card reading computer peripheral to send monetary transaction data to the personal computer or workstation for delivery onto the Internet or for securely sending monetary transaction data read by the smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing. Schneier is silent about the data being read by one device, and being sent by a second device onto the Internet. The rejection is improper and should be reversed.

With respect to claim 25, claim 25 recites the method of claim 24 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the monetary transaction data to the personal computer or the work station. In support of his rejection, the Examiner asserts that Schneier at p. 34-39; pp. 70-71; pp. 59-69; pp. 428-435; pp. 296-297; p. 436, and pp. 165-169) shows elements that suggest “encrypting or coding at least a portion of the card information entered by respective individuals prior to transmission of the card information to the personal computer or the work station.”

The Examiner concedes that Schneier does not explicitly show “a portion of the card information entered by respective individuals.” The Examiner tries to fill this gap in knowledge in the non-analogous art by citing to Schneier at p. 28; pp. 329-330; pp. 70-71 and pp. 165-169 and asserting that these portions of suggest the recitations of claim 25. From these sections of the art, the Examiner concludes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier

(pp. 329), i.e., “*Message Digest*” would have been selected in accordance with “a portion of the card information entered by respective individuals.” of messages, because “*Message Digest*” capability would have provided a fingerprint of the message that is unique.

Schneier at pp. 329-330 does not help make out a *prima facie* case of obviousness of claim 25. This portion of the art generally relates to an MD4-5 128-bit hash of an input message. There is an absolute lack of any suggestion of the claimed method recitation. This portion of the art, alone or in combination with the other art of record, simply does not teach or fairly suggest Applicant’s claimed method recitation of encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the monetary transaction data to the personal computer or the work station. “The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) *objective evidence of nonobviousness*.” *In re Dembiczak* \_\_F.3d \_\_ (Fed. Cir. 1999) (Emphasis added.) The Examiner has produced no evidence of a suggestion of this claim recitation, including but not limited to the timing of the encryption or coding. The rejection is improper and must be reversed.

Claim 26 recites the method of claim 24 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the card information to the Internet. Claim 27

recites the method of claim 25 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the card information to the Internet. The Examiner has produced no evidence of a suggestion of this claim recitation, including but not limited to the timing of the encryption or coding. The rejection is improper and must be reversed. *In re Dembiczak*, \_\_\_F.3d \_\_\_(Fed. Cir. 1999). With respect to claims 26 and 27, the Examiner asserts that Schneier shows the method of claim 24 and 26. For the reasons stated above, the rejection of claims 26 and 27 on the basis of the rejection of claims 24 and 26 is improper and must be reversed.

Claim 28 recites the method of claim 24 in which said monetary transaction data further comprises credit card or debit card information, and in which said securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing further comprises presenting the credit card or debit card information to the computer peripheral; transferring encrypted credit card or debit card information from the personal computer or work station to the Internet; and, off-loading the encrypted credit or debit card information from the Internet to a processor, the processor being a card account processor, bank credit card processing device, debit card processing device, recipient credit card processing device and a debit card processing device. The Examiner rejected claim 28 for substantially the same reasons as claim 24. The Applicant reasserts his previous position with respect to claim 24 and states that it applies with equal force with respect to claim

28.

Further, the Examiner has failed to provide a teaching or fair suggestion in the art of record, alone or in combination for the recitation of *off-loading the encrypted credit or debit card information from the Internet to a processor*. The art of record, alone or in combination, was not directed to solving the problems of on-line shopping. It would not have occurred to a person of ordinary skill to try the proposed combination of claimed features of claim 28 until the gap in the knowledge and understanding of those of ordinary skill in the art regarding the benefits of the combination of these features were understood. This gap in knowledge was filled by the Applicant's invention.

At the time the invention was made there was a significant gap in the knowledge and understanding of those of ordinary skill in the art necessary to combine the method steps of claim 28. No one in the art was directing their attention to motivating Internet shopping by consumers with smart cards or addressing the problems associated with this kind of Internet shopping. No one, except for Applicant, realized that global monetary transactions could be made quickly, without error and without risk of fraud using Applicant's claimed method and system. There is a cooperative relationship between the combination of Applicant's method recitations. The identifiable advantage that arises from the interaction of the method steps of claim 24 and the other dependent claims: The art is directed to solving problems other than those solved by the Applicant, and so it is not surprising that these claim recitations are absent from the art.

Claim 29 recites the method of claim 28 in which the card information is encrypted at the smart card reading computer peripheral. Claim 30 recites the

method of claim 28 in which the credit card or debit card information is encrypted at the personal computer or workstation. Claim 31 recites the method of claim 28 in which the card information is encrypted at both the personal computer or workstation and at the smart card reading computer peripheral. The Examiner has not established a *prima facie* rejection of claims 29-31. The rejections are improper and should be reversed.

The Examiner asserts that claims 29, 30 and 31 are rejected for substantially the same reasons as claim 25. This means that the Examiner asserts that Schneier at p. 34-39; pp. 70-

71; pp. 59-69; pp. 428-435; pp. 296-297; p. 436, and pp. 165-169 and p. 28; pp. 329-330; pp. 70-71 and pp. 165-169 teaches or fairly suggests the method recitations of claims 29-31.

For the reasons stated above, the art is silent with respect to the location of any encryption, much less encryption of credit and debit card information. The Examiner tries to fill this gap in knowledge in the non-analogous art by citing to Schneier and relying on the disclosure of Schneier (pp. 329), i.e., "*Message Digest*."

Schneier at pp. 329-330 does not help make out a *prima facie* case of obviousness of claims 29-31. As stated previously, this portion of the art generally relates to an MD4-5 128-bit hash of an input message. There is an absolute lack of any suggestion of the claimed method recitations of claims 29-31. This portion of the art, alone or in combination with the other art of record, simply does not teach or fairly suggest Applicant's claimed method recitations of encrypting or coding at least a portion of the monetary transaction data entered by respective individuals

prior to transmission of the monetary transaction data to the personal computer or the work station or as otherwise claimed. "The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) *objective evidence of nonobviousness*." *In re Dembiczak*, \_\_\_\_ F.3d \_\_\_\_ (Fed. Cir. 1999) (Emphasis added.) The Examiner has produced no evidence of a suggestion of these claim recitations, including but not limited to the timing of the encryption or coding or the types of devices upon which these recitations are executed. The rejection is improper and must be reversed.

Claim 32 recites the method of claim 28 further comprising the steps of correlating transaction information other than the card information to the encrypted debit or credit card information, and decoding the encrypted debit or credit card information at a device remotely located from the personal computers or work stations. There is no teaching or fair suggestion in the art, alone or in combination for the recitation of off-loading as claimed in claim 28. As such, the rejection of claim 32 is improper and must be reversed.

Moreover, the Examiner rejected claim 32 because the Examiner asserts that Shneier shows the method of claim 28. The Examiner concedes that Schneier does not explicitly show "correlating transaction information other than the card information to the encrypted card information...." The Examiner tries to fill the void resulting from a lack of teaching or suggestion in the art of the Applicant's claimed recitations by citing to Schneier at pp. 34-39; pp. 70-71; and pp. 59-69 and asserting that this portion of text suggests Applicant's claimed recitations in claim 32. The

Examiner concludes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Schneier disclosure of “*timestamping*” would have been selected in accordance with “correlating transaction information other than the card information to the encrypted card information because “*timestamping*” would have been notoriously well known by one of ordinary skill in the art at the time of the invention.

This citation does not help the Examiner make out a *prima facie* case of obviousness of claim 32. Pages 34-39 generally deal with digitally signing documents. Pages 70-71 generally relate to group signatures. Pages 59-69 generally relate to secret sharing of secret sauces, certification that a document existed at a certain date (time-stamping), subliminal channels, undeniable digital signatures, and fail-stop digital signatures. These sections of art clearly do not fairly suggest Applicant’s claimed recitations: correlating transaction information other than the card information to the encrypted debit or credit card information, *and* decoding the encrypted debit or credit card information at a device remotely located from the personal computers or work stations.

In fact, this is not surprising since the reference is non-analogous art to the Applicant’s invention. The art of record, alone or in combination, was not directed to solving the problems of on-line shopping. It would not have occurred to a person of ordinary skill to try the proposed combination of claimed features of claim 32 until the gap in the knowledge and understanding of those of ordinary skill in the art regarding the benefits of the combination of these features were understood for facilitating Internet shopping using smart cards. This gap in

knowledge was filled by the Applicant's invention.

At the time the invention was made there was a significant gap in the knowledge and understanding of those of ordinary skill in the art necessary to combine the method steps of claim 32. Consequently, the art did not suggest, alone or in combination the decoding step or any of the other steps claimed. No one in the art was directing their attention to motivating Internet shopping by consumers with smart cards or addressing the problems associated with this kind of Internet shopping, including correlating additional information to the card information or decoding the information.

Claim 33 recites the method of claim 28 further comprising entering a PIN number. The Examiner has not made out a *prima facie* case of obviousness of claim 33 since there is no teaching or fair suggestion of this claim recitation in combination with the recitations of claim 28.

With respect to claim 33, the Examiner asserts that Schneier shows the method of claim 28. As stated above there is no factual support for the assertion the Examiner makes. The rejection of claim 33 is improper on this basis and should be reversed. In fact, the Examiner concedes that Schneier does not explicitly show "entering a PiN number on said computer peripheral or workstation." The Examiner attempts to fill this gap in the art by citing to Schneier at p. 34-39; pp. 70-71; pp. S9-69; pp. 428-435; pp. 296-297; p. 436, and pp. 165-169, and particularly to Schneier at p. 34-39; pp. 70-71; and pp. 59-69 for the proposition that the Applicant's claimed recitation is suggested there. From this the Examiner concludes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Schneier disclosure of a unique identifier



would have been selected in accordance with "entering a PiN number on said computer peripheral or workstation" because unique identifiers would have been notoriously well known by one of ordinary skill in the art at the time of the invention.

The art of record does not help the Examiner make out a *prima facie* case of obviousness. Schneier at p. 34-39; pp. 70-71; and pp. 59-69 does not provide support for the Examiner's assertion that the Applicant's claimed recitations are suggested there. Pages 34-39 generally deal with digitally signing documents. Pages 70-71 generally relate to group signatures. Pages 59-69 generally relate to secret sharing of secret sauces, certification that a document existed at a certain date (time-stamping), subliminal channels, undeniable digital signatures, and fail-stop digital signatures. These portions do not teach or fairly suggest a PIN entered in an Internet shopping transaction. This is not surprising since the reference is not directed in solving the problems of Internet shopping. As such, this rejection is improper and should be reversed.

Claim 34 recites a kit for streamlining Internet transactions. The kit includes an Internet linked mag stripe card reading or smart card reading computer peripheral as an input device for a personal computer or workstation, a communication link for communicating the credit or debit card information to a personal computer; and, a routine that allows the card information to be securely transferred from the computer peripheral to a remote computer other than the personal computer or workstation, the remote computer being communicatively linked to the Internet.

The Examiner rejected the kit claimed in claim 34 for substantially the same

reasons as claim 21. In support of his rejection of claim 21, and thus claim 36, the Examiner asserts that Schneier at pp. 117-124; pp. 428-435; pp. 296-297; and p. 436 suggests: "An Internet linked computer peripheral as an input device for a personal computer or workstation simplifying and safeguarding the flow of monetary transaction information onto the Internet, comprising, in combination: a smart card reader for reading credit and/or debit card information from an information bearing smart credit and/or debit card; and a secure link to the Internet, whereby the capture of monetary transaction is safeguarded by capture of the information on a transaction by transaction basis." There is a substantial gap in the art that the Examiner cannot fill. The art, alone or in combination fails to teach or fairly suggest the elements of Applicant's claimed kit: a card reading peripheral, a personal computer and a remote computer other than the personal computer or workstation connected to the Internet. The Examiner has failed to supply any evidence to show that these elements of Applicant's claimed kit are taught or fairly suggested in the art of record, alone or in combination. That is not surprising since the art was not directed at solving the problems of Internet shopping for a consumer through the provision of Applicant's claimed kit. The rejection of claim 34 is improper and should be reversed.

The same argument pertains to the rejection of claims 35 and 36. Claims 35 and 36 were rejected on the same grounds as claim 34. The Examiner asserts that Schneier at p. 34-39; pp. 70-71; pp. 59-69; pp. 428-435; pp. 296-297; p. 436, and pp. 165-169 suggests a "remote computer...an acquiring bank computer, and a card account processor computer." These citations do not assist the Examiner in making out a *prima facie* case of obviousness. The reference does not solve the

problem of Internet shopping. These claim recitations are not suggested in the art. In fact, the Examiner admits that Schneier does not explicitly teach or suggest Applicant's claimed recitations of: a monitor, at least two speakers, and a keyboard or the recitation of claim 36 related to the Internet.

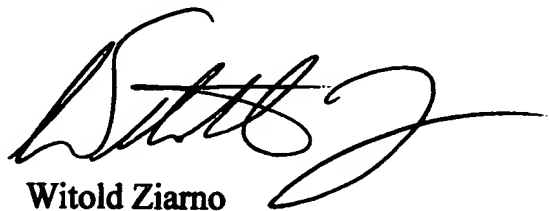
Yet the Examiner concludes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Schneier would have been selected in accordance with "a monitor, speakers, and a keyboard" because such a configuration would have been notoriously well known by one of ordinary skill in the art at the time of the invention. There can be no motivation to include these elements from the disclosure of the reference since the reference is not directed to solving the problems of Internet shopping for consumers. The Examiner concedes that Schneier does not explicitly show a "kit further comprising the Internet." The rejection is improper and should be reversed.

### ***CONCLUSION***

The Examiner's rejections are based upon impermissible core factual findings under *In re Zurko* and must be reversed on that basis. Moreover, the Examiner in his rejection of Applicant's claims promulgates a new standard for establishing a *prima facie* case of obviousness. Under the Examiner's new standard it is permissible to combine the alleged teachings of non-analogous sources of art using an Applicant's specification as a template to allegedly reconstruct an invention. This has never been the law to establish a *prima facie* case of obviousness, and this is an error of law. The Examiner must be reversed.

A new standard for establishing a *prima facie* case of obviousness that permits the combination of alleged teachings from non-analogous sources of art by simply picking and choosing features from non-analogous sources of art to reconstruct an invention without an suggestion to do so in the art or in knowledge commonly known in the art must not be permitted. The Applicant respectfully requests that the Examiner's rejections of all of the claims pending in this application be reversed.

Respectfully submitted,  
Pierun Corporation

A handwritten signature in black ink, appearing to read 'Witold Ziarno', with a long horizontal flourish extending to the right.

Witold Ziarno  
Reg. No. 39,888

Dated: March 14, 2002

**APPENDIX UNDER 37 CER 1.912(c) (9)**

21. An Internet linked computer peripheral as an input device for a personal computer or workstation comprising, in combination:
- smart card reader for reading credit and/or debit card information from an information bearing smart credit and/or debit card; and, a secure link to the Internet.
22. The computer peripheral of claim 21 in which the secure link to the Internet comprises an encryption routine on the computer peripheral encrypting the credit and/or debit card information prior to transmission of the credit or debit card information to the personal computer or workstation.
23. The computer peripheral of claim 21 in which the secure link further comprises an encryption routine at the personal computer or work station encrypting the credit or debit card information prior to transmission of the credit or debit card information onto the Internet.
24. A method comprising,
- providing individuals making monetary transactions with a smart card reading computer peripheral as an input device for a personal computer or

workstation, said smart card reading computer peripheral designed to send monetary transaction data to said personal computer or workstation for delivery onto the Internet, and securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing.

25. The method of claim 24 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the monetary transaction data to the personal computer or the workstation.

26. The method of claim 24 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the card information to the Internet.

27. The method of claim 25 further comprising encrypting or coding at least a portion of the monetary transaction data entered by respective individuals prior to transmission of the card information to the Internet.

28. The method of claim 24 in which said monetary transaction data further comprises credit card or debit card information, and in which said securely sending monetary transaction data read by said smart card reading computer peripheral from the personal computer or workstation onto the Internet for further processing further comprises presenting the credit card or debit card information to the smart card reading computer peripheral; transferring encrypted credit card or debit card information from the personal computer or work station to the Internet; and, off-loading the encrypted credit or debit card information from the Internet to a processor, the processor being a card account processor, bank credit card processing device,

debit card processing device, recipient credit card processing device and a debit card processing device.

29. The method of claim 28 in which the card information is encrypted at the smart card reading computer peripheral.

30. The method of claim 28 in which the credit card or debit card information is encrypted at the personal computer or workstation.

31. The method of claim 28 in which the card information is encrypted at both the personal computer or workstation and at the smart card reading computer peripheral.
32. The method of claim 28 further comprising correlating transaction information other than the card information to the encrypted debit or credit card information, and decoding the encrypted debit card or credit card information at a device remotely located from the personal computers or work stations.
33. The method of claim 28 further comprising entering a PIN number.
34. A kit for streamlining Internet transactions comprising:  
an Internet linked smart card reading computer peripheral as an input device for a personal computer; a communication link for communicating the credit or debit card information from the Internet linked smart card reading computer peripheral to a personal computer; and, a routine that allows the card information to be securely transferred from the computer peripheral to a remote computer other than the personal computer, the remote computer being communicatively linked to the Internet.
35. The kit of claim 34 further comprising a monitor, at least two speakers,



and a keyboard; and, in which the remote computer is selected from the group consisting of an acquiring bank computer, and a card account processor computer.

36. The kit of claim 34 further comprising the Internet.
37. The method of claim 32 further comprising crediting or debiting an account.
38. The method of claim 37 further comprising sending a receipt comprising information representative of at least a portion of said monetary transaction data.
39. The kit of claim 34 further comprising a multiplicity of personal computers.
40. The kit of claim 39 further comprising a plurality of monitors.
41. The kit of claim 40 further comprising a plurality of keyboards and speaker.